AMENDMENT

Amendments to the Claims

The claims are amended as shown on the following pages under the heading LIST OF CURRENT CLAIMS. The list shows the status of all claims presently in the application including any current amendments. This list of claims is intended to supersede all prior versions of the claims in the application. Any cancellation of claims is made without prejudice or disclaimer.

LIST OF CURRENT CLAIMS

1. (Currently Amended) Configurable large-area display system including a display comprising a plurality of sub-displays that each contain an array of pixels, said system further comprising a central controller hardware and software block containing software to control the display system and to generate control data and video signals to be displayed on the display; a digitizer that converts said control data and video signals to ~~a digital signal~~ digitized control data and video signals compatible with the display; wherein the digitized control data and video signals are passed from one sub-display to the next, and wherein each sub-display is a control unit capable of controlling the individual pixels of said control unit as a function of ~~its position~~ the position of said control unit within the display and of the ~~received~~ digitized control data and video signals.

2. (Previously Presented) Configurable large-area display system according to claim 1, wherein said central controller hardware and software block is electrically connected to digitizer via a standard RS-232 connection.

3. (Previously Presented) Configurable large-area display system according to claim 1, wherein the digitizer is connected to the display by means of a fiber link.

4. (Previously Presented) Configurable large-area display system according to claim 1, wherein, in the event that the distance between two successive control units exceeds a predetermined distance, an intermediate resyncer is used between said two control units to receive and retransmit the control data and video signals.

5. (Currently Amended) Configurable large-area display system according to claim 1, wherein each control unit further includes an AC-to-DC power supply, a resynchronizer

unit to receive and transmit data, an EEPROM, and a controller driving a plurality of pixel clusters that each includes a plurality of modules, each containing an array of light-emitting pixel elements.

6. (Currently Amended) Configurable large-area display system according to claim 5, wherein ~~the EEPROM contains~~ each module contains a local storage device to store production data and factory light output measurements, as well as color coordinates for each pixel within ~~modules~~ each module.

7. (Previously Presented) Configurable large-area display system according to claim 5, wherein the controller contains algorithms to parse the control data and video signals received into specific packets associated with the location of a given module within the concerned control unit of display system.

8. (Previously Presented) Configurable large-area display system according to claim 5, wherein the controller is provided with means for managing the pulse width modulation associated with driving pixels of each module.

9. (Previously Presented) Configurable large-area display system according to claim 5, wherein the control unit comprises four pixel clusters, each pixel cluster containing 32 modules that are suitably interconnected for a daisy-chain signal distribution.

10. (Previously Presented) Configurable large-area display system according to claim 5, wherein each module comprises an array of 2 x 2 pixels.

11. (Previously Presented) Configurable large-area display system according to claim 1, wherein the pixels are light-emitting diodes (LED).

12. (Previously Presented) Configurable large-area display system according to claim 1, wherein the dimensions of the modules are relatively small, such that they can be assembled to form displays having any 2D or 3D shape.

13. (Previously Presented) Configurable large-area display system according to claim 1, wherein the modules of the display are arranged in a standalone manner so that the display apparently has a transparent structure.

14. (Previously Presented) Control unit for use in a configurable large-area display system according to claim 1, said control unit configured as a sub-display comprising a plurality of pixel clusters, each comprising a plurality of pixel modules that are sequentially interconnected with each other and each containing an array of light-emitting pixel elements.

15. (Previously Presented) Control unit according to claim 14, including an AC-to-DC power supply, a resynchronizer unit arranged to receive and transmit control data and video signals; a controller connected to the resynchronizer unit and driving the pixels contained in the modules and clusters; and an EEPROM connected to the controller .

16. (Currently Amended) Control unit according to claim 15, wherein ~~the EEPROM contains~~ each module contains a local storage device to store production data and factory light output measurements, as well as color coordinates for each pixel within ~~modules~~ each module.

17. (Previously Presented) Control unit according to claim 15, wherein the controller contains algorithms to parse the control data and video signals received into specific packets associated with the location of a given module within the concerned control unit of display system.

18. (Previously Presented) Control unit according to claim 14, wherein the controller is provided with means for managing the pulse width modulation associated with driving pixels of each module.

19. (Previously Presented) Control unit according to claim 14, wherein the pixels are light-emitting diodes (LED).

20. (Currently Amended) Method of operating a large-area display system made in accordance with claim 1, comprising the steps of applying power to the display; determining whether the display is to be configured or reconfigured; determining the hardware configuration; setting the desired spacing of the pixels; reading ~~an EEPROM~~ a local storage device contained in each module for obtaining stored production data and factory light output measurements, as well as color coordinates for each pixel within ~~modules~~ each module; transmitting and distributing video signals and control data to the display; parsing the video data, and transmitting the video data stream to the pixel clusters.

21. (Currently Amended) Method of operating according to claim 20, wherein, depending on the desired spacing, some intermediate pixels, which are ~~spaced apart less further then desired~~ not sufficiently far apart to have the appearance of being a transparent structure, are ignored for use.